This is an update concerning the 9 images in the "mystery mod boxes" folder in the EMLsynth photos section. The images were collected from various places on the web including Ebay. Many of these boxes are labeled "Electronic Music Lab" and I don't think the traders who offered these as EML products mean to deceive, but these pieces were not made by the EML company of Vernon Connecticut known for making the model 101 synth and the 400/401 sequencer.

These modules are from I.W. Turner Inc. of Port Washington, New York. The "Electronic Music Lab"(always singular) label is probably a generic name for where they were made and not meant to be a brand name. They are self contained units each in it's own housing and most seem to have their own 9V battery compartment.

Modules from EML/Electronic Music Laboratories (always plural) of Vernon CT were to be used as internal components. They were unhoused and were clearly designed for DIY applications. You can see a pdf of a data sheet from the "real" EML for a filter module which I just added to the file archive section. Or you can see it in jpeg image form along with other material from EML and other synth lines at member Brandon's website:

http://www.fdiskc.com/usrsyn/
http://www.fdiskc.com/usrsyn/eml/

Thanks to Brandon, Nick D. Kent, DJ, and Andrew Sanchez for recent EML info.

I am trying to find out more about the I. W. turner gear and will probably have another update soon.

MB

Date: Mon, 19 Apr 2004 00:37:04 -0700
> From: Mike <digiboy@nyc.rr.com>
REPLY From: Don Tillman > Date: Mon, 19 Apr 2004 01:17:50 -0400
> Hi Don,
> I host a small yahoo user group list for those interested in
> vintage synthesizers that were made by a company called "EML"
> also known as "Electronic Music Laboratories" located in Vernon,
> Connecticut.

Hi Mike.

Ah yes, the old Electrocomp.

> One of our members found your website (Isn't the internet an
> amazing thing?). It appears that you worked at I. W. Turner
> around the time the modules were made and I wonder if you could
> shed any light on what they were all about. Was there any
> connection at all with the Vernon Connecticut EML company?

Yeah, that's me.

There's no connection at all between the Turner boxes and the Electrocomp folks. "Electronic Music Lab" was used as a generic term there.

> It's interesting because these pieces look like they may have
> been for educational use.

Exactly.

The founder of I.W. Turner, William Fish, was by profession an accomplished high school music teacher and band director, and the company's product direction was with music education in mind.

The first Turner product was an electromechanical metronome.

The Turner Electronic Music Lab was a collection of small synth modules intended to introduce children to the elements of electronic music in elementary school music classes. At the time this was innovative, and I guess it would still be innovative today. As such, the modules were not precision low drift devices, but were battery powered easy to use units that didn't get damaged if you threw them around (and wouldn't hurt anybody they were thrown at!). Students

could work at the units individually or in groups. The tactile nature of an oscillator you can hold in your hand was considered important. They were sold through distributors that catered to schools and not through regular music stores.

[Don took a look at the images of the “Electronic Music Lab” modules in our Photos section]

Yep, that's them.

The blue and red boxes are somebody's homebrew and not Turner units.

The Sequencer is there, meaning it's a later set. The Sequencer is entirely my design and a very cool sounding machine.

The Ring Modulator is my design also. It's pretty decent.

I redesigned many of the other units. (Not the mixer and Theremin; those stayed with the original design throughout their product life.)

Playing the Theremin with the Sequencer through the Ring Modulator is an awful lot of fun.

> Do you recall if your IW Turner
> sequencer could be used to drive other synths or was it strictly
> meant only to work with their own modules?

No, it was completely self contained. None of the Turner boxes dealt with control voltages.

There were two versions of the sequencer; one in a plastic box that was sold with the Electronic Music Lab modules, and one in an aluminum box that was actually sold through music stores.

The Sequencer was a square wave clock and a 4-bit binary counter, and together those five signals effectively generated a 32-note binary counting sequence, and the five bits were mixed down with negative-zero-positive knobs to drive a sawtooth VCO.

Set the knobs to a positive binary weighting (full, 1/2, 1/4, 1/8, 1/16) and you get a staircase up, set the knobs to a negative binary weighting and you get a staircase down, set the knobs to 12-o'clock and you get a still pitch. Most other settings generated musically interesting somewhat random sounding sequences.

Something like a poor-man's "Muse", if you've heard of that device.

-- Don